2018 EXCELLENCE IN CONCRETE CONSTRUCTION AWARDS

Virginia Chapter - American Concrete Institute

2019 Virginia Concrete Conference

February 28, 2019

George R. Kuhn, Jr.
Virginia Chapter - ACI President

- Established in 1989
- Excludes the cities of Alexandria & Arlington, and the counties of Fairfax, Loudon and Prince William.
- Membership open to anyone with an interest in concrete: architects, engineers, material suppliers, equipment suppliers, inspectors, owners, students, and anyone else interested in pursuing the best use of concrete
- Focus areas: education, training & certification, recognition and advancing concrete knowledge

<u>Certifications programs:</u>

- Concrete Strength Testing Technician
- Aggregate Testing Technician Level I
- Concrete Laboratory Testing Technician Level II
- Adhesive Anchor Installer & Installation Inspector
- Specialty Commercial/Industrial Flatwork Technician
- Concrete Flatwork Finisher & Technician
- Concrete Flatwork Tradesman (new)
- Concrete Construction Special Inspector
- Concrete Transportation Construction Inspector
- Masonry Field & Laboratory Testing Technician (new)
- Self-Consolidating Concrete Testing Technician (coming)

- acivirginia.org
- Annual Membership:
 - Individual \$35
 - Young Professional \$20
 - Student \$0
 - Corporate (up to 3 persons) \$75
 - State-wide Corporate (up to 10 persons) \$150



Board of Directors

• President:

1st Vice President:

• 2nd VP/Secretary:

• Treasurer:

• Past President:

Directors:

George Kuhn – Chandler Concrete

Isaac Perkins – Tindall Corporation

TR Fluker – Schnabel Engineering

Jack Kowalski – Branscome, Inc.

Marie Derby – Argos-US

Michael Brown - WSP USA

Ed Forbes – Sauer, Inc.

William Gaspar – Moseley Architects

Derek Imperial – Swope & Associates, Inc.

Hank Keiper – The SEFA Group

Steve Lloyd – Lloyd Concrete Services, Inc.

Charles Long - Allied

Chuck Starnes – retired

Mark Townsend – Essex Concrete Corporation

Commonwealth Award Criteria

- ✓ Project essentially completed in 2018
- ✓ Have a substantial quantity of concrete and/or incorporate significant architectural, technical or sustainable concepts of concrete use
- ✓ Located within Virginia (except for Arlington, Fairfax, Loudon, and Prince William counties)
- ✓ Single Overall Award Commonwealth Award

Award Categories

The 6 categories mirror the ACI International's Excellence in Concrete Construction Awards

- ✓ Low Rise Buildings (1-3 stories)
- ✓ Mid-Rise Buildings (4-15 stories)
- ✓ High-Rise Buildings (more than 15 stories)
- ✓ Decorative Concrete
- ✓ Infrastructure
- ✓ Repair and Restoration

2018 Commonwealth Award Category Winners

Category: Low-Rise Buildings Blue Skies Lane Home

Owner: Joe & Lori Friesen

Contractor: Design Concrete Builders, Inc.

• Concrete Supplier: Rockingham Redi-Mix









Category: Low-Rise Buildings Blue Skies Lane Home

Features:

- Footer to roofline ICF perimeter walls
- Spray on cement-based exterior finish
- Stamped concrete porches, walk out patio and driveway
- Concrete countertops and 5' x 10' concrete top island
- Energy efficient R-50 home

Category: Decorative Decorative Decorative Driveway

Owner: Atul & Arpita Aggarwal

Prime Contractor: Richard Atack Construction

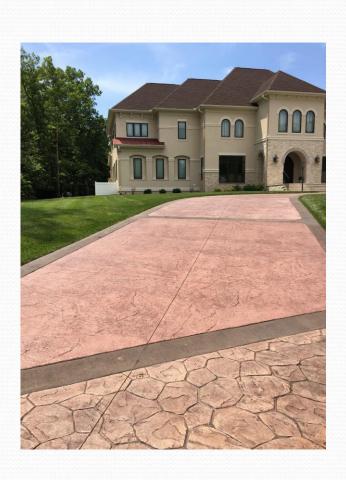
Concrete Contractor: River City Concrete, Inc.

• Concrete Supplier: S.B Cox Ready-Mix, Inc.

Decorative Driveway



Decorative Driveway





Decorative Driveway

Features:

- 64 cy of concrete used
- Multiple colors/pattern stamps:
 Dusty Rose color Jumbo Stamp pattern, Canvas color Random Stone pattern; all with Dessert Tan release agent
- Walnut Stain driveway borders
- Multiple pours with double forming to achieve the overall look on the panels and control joints

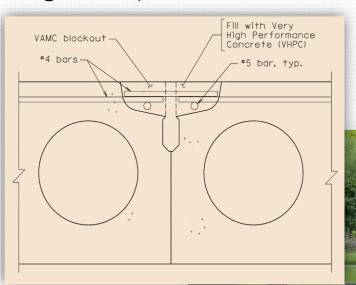
Category: INFRASTRUCTURE

Route 744 Bridge over Bluestone River, Tazewell County

- Owner: Virginia Department of Transportation
- Structural Engineer: VDOT Bristol District S&B
- Contractor: Patrick Construction, Inc.
- Concrete Fabricator (Precast): Eastern Vault Company
- Concrete Supplier: McClure Concrete Products, Inc.

Route 744 Bridge over Bluestone River, Tazewell County

Virginia Adjacent Member Connection (VAMC):



- Conventional shear keys fail, leading to poor load distribution and premature corrosion from leakage of chloride-laden runoff
- VAMC was developed by VDOT and Virginia Tech to ensure more durable longitudinal joints and extend bridge life.

Route 744 Bridge over Bluestone River, Tazewell County

Very High Performance Concrete (VHPC):



- VHPC is a mix of cement, silica fume, fly ash, small aggregate and steel fibers developed to reduce lap splice length of reinforcing steel in the connections.
- VHPC costs 60% less than Ultra High Performance Concrete (UHPC), which is gaining use for connecting precast members.



Category: INFRASTRUCTURE

Route 744 Bridge over Bluestone River, Tazewell County

Features:

- Prestressed Concrete Adjacent Box Beam Bridge
- Span Length: 49'-9"; Overall Width: 18'-0"
- Corrosion resistant reinforcing (CRR) steel and lowpermeability concrete were used for the bridge beams
- The first bridge constructed with new standard Virginia Adjacent Member Connection (VAMC) filled with Very High Performance Concrete (VHPC)

Category: Repair & Restoration 13 Pepper Street Retaining Wall

Owner: Town of Christiansburg, VA

Structural Engineer: Circeo Geo-Technical Services

• Prime Contractor: DCI Shires, Inc.

Concrete Contractor: Albin Landscaping

• Concrete Supplier: Chandler Concrete









Features:

- Versa-Lok segmental retaining wall units
- 3 colors used to mimic adjacent natural stone
- Stabilized aggregate concrete backfill
- Colored concrete borders and control joints





2018 Commonwealth Award



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Congratulations to all award submittals and our award winner!

Start planning now!!

ACI Virginia will solicit
2019 Commonwealth Award
candidates in the Fall.

Please remember to support the continued efforts of Virginia ACI – our group conducts certification classes and educational seminars throughout Virginia –

ACIVirginia.org



